



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

841 Chestnut Building
Philadelphia, Pennsylvania 19107

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Marilyn Hewitt
Project Coordinator
Environmental Resources Management, Inc.
855 Springdale Drive
Exton, PA 19341

16888 31
SEP 28 1988

Re: Eastern Diversified Metals Site
Hometown, PA

Dear Marilyn:

In response to your letter dated 20 September requesting conditional approval of drilling - related task items, I am formally granting conditional approval for those tasks. I spoke with David Steele on 26 September and gave a verbal approval for the subsurface soil sampling, solid waste sampling, abandonment of the existing monitoring well, and installation of new monitoring wells.

A copy of the Geoscience Consultants Limited's Quality Assurance Project Plan (September 21, 1988) for obtaining sample splits is enclosed for your information.

If you have any questions, I can be reached at (215) 597-8240.

Sincerely,

Suzanne T. Billings

Suzanne T. Billings
EPA Project Coordinator

Enclosure

cc: Virginia Nicholas, GCL
Reno Ducceschi, PADER
Cecil Rodrigues, Esq.
Michael W. Steinberg, Esq.
Heather Winett, Esq.

AR300978



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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841 Chestnut Building
Philadelphia, Pennsylvania 19107

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Marilyn Hewitt
Project Coordinator
Environmental Resources Management, Inc.
855 Springdale Drive
Exton, PA 19341

SEP 28 1988

Re: Eastern Diversified Metals Site
Hometown, PA

Dear Marilyn:

As part of the Remedial Investigation/Feasibility Study, Environmental Resources Management, Inc. (ERM), on behalf of the Respondents, requested approval to ship limited quantities of the fluff off-site for treatability studies. One major issue was raised by me regarding which notification procedures were required to ship the hazardous substances off-site.

Through communication between the U.S. Environmental Protection Agency and the Respondents, it was concluded that the Respondents are not subject to the hazardous waste notification procedures because the shipment of fluff is listed as a new exclusion under Section 261.4(e) Treatability Study Samples. The exclusion can be found in the Federal Register, vol. 53, No. 138, Tuesday, July 19, 1988, page 27301.

Prior to transporting any fluff from the site, contact me so I can keep up to date on the amount of waste being removed from the site.

If you have any questions, I can be reached at (215) 597-8240.

Sincerely,

Suzanne T. Billings
EPA Project Coordinator

cc: Virginia Nicholas, GCL
Reno Ducceschi, PADER
Cecil Rodrigues, Esq.
Michael W. Steinberg, Esq.
Heather Winett, Esq.

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T E S III

**TECHNICAL ENFORCEMENT SUPPORT
AT HAZARDOUS WASTE SITES**

U.S. EPA CONTRACT NO. 68-01-7331

AR300980

CDM Federal Programs Corporation

**DRAFT REPORT
QUALITY ASSURANCE PROJECT PLAN
FOR OVERSIGHT OF FIELD INVESTIGATIONS
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
EASTERN DIVERSIFIED METALS SITE
HOMETOWN, PENNSYLVANIA**

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, D.C. 20460**

Work Assignment No.	:	669
EPA Region	:	III
Site No.	:	3PN2
Contract No.	:	68-01-7331
CDM Federal Programs Corporation Document No.	:	T669-CO3-DR-CCCC-4
Prepared By	:	Geoscience Consultants, Ltd.
Work Assignment Project Manager	:	B. Virginia Nicholas
Telephone Number	:	(301) 587-2088
Primary Contact	:	Suzanne Billings
Telephone Number	:	(215) 597-8240
Date Prepared	:	September 21, 1988

AR300981

QUALITY ASSURANCE PROJECT PLAN
EPA CONTRACT NO. 68-01-7331
EASTERN DIVERSIFIED METALS RI/FS
WORK ASSIGNMENT NO. 669

Prepared by:

GEOSCIENCE CONSULTANTS, LTD.
1109 Spring Street, Suite 706
Silver Spring, Maryland 20910

APPROVALS:

TES III WA Manager _____

Date

TES III Regional Manager _____

Date

Rosemary Ellersick
TES III QA Director _____

9/21/88

Date

EPA Regional Project Manager _____

Date

EPA QA Officer _____

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Date

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1.0 INTRODUCTION

1.1 BACKGROUND

The USEPA has requested that a review be performed of the Remedial Investigation/Feasibility Study (RI/FS) completed by the Responsible Parties (RPs) of the Eastern Diversified Metals (EDM) Site in Schuylkill County, Pennsylvania. USEPA has requested that oversight of the RP RI/FS field activities be performed as part of this review. CDM Federal Programs Corporation (CDM FPC) received this Work Assignment under EPA Contract Number 68-01-7331 and has instructed its Team member, Geoscience Consultants, Ltd. (GCL), to perform this Work Assignment.

The EDM Site occupies an area of approximately 25 acres in Hometown, Pennsylvania. From 1966 to 1977, an estimated 157 million pounds of "fluff" (waste insulation material) generated by copper wire recycling activities were disposed of in an open waste pile approximately 60 feet in height and having base dimensions of 500 feet by 3,000 feet. The Pennsylvania Department of Environmental Resources (PADER) determined that a phenolic leachate has emanated from this waste pile.

In 1974, as a result of a Consent Agreement with PADER, EDM installed a wastewater treatment plant, diversion ditches, and an interceptor trench. The diversion ditches and interceptor trench divert surface water and shallow ground water, respectively, to the treatment plant. A surface impoundment associated with the wastewater treatment plant sometimes overflows into a tributary of the Little Schuylkill River. The Little Schuylkill River serves downstream recreational uses, such as trout fishing, within 3 miles of the site.

Sludge from the wastewater treatment plant was disposed of on top of the waste pile until 1983, when PADER issued a Notice of Violation to the company. The sludge is now taken to a RCRA permitted disposal facility.

The site is underlain by the Mauch Chunk Formation, one of the most important water-bearing formations in northeastern Pennsylvania.

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Approximately 1,400 people are served by wells within 3 miles of the site that draw from the Mauch Chunk Formation.

EPA has contacted a number of RPs and has negotiated an Order of Consent to conduct an RI/FS at the EDM Site. The primary objective of this Work Assignment is to ensure that the documents submitted by the RP group will lead to the completion of a RI/FS in accordance with CERCLA, SARA and EPA Guidance Documents. An attendant objective of this Work Assignment is to assure the USEPA that the RP's contractor(s) adhere to the RP's Work Plan and Remedial Investigation Site Operations Plan (RISOP) during field investigation activities. Pursuant to these objectives, GCL will provide quality assurance and quality control of sampling activities and laboratory analyses through the acceptance and submission of sample splits during oversight of field investigation activities.

1.2 SCOPE

This site-specific Quality Assurance Project Plan (QAPP) specifies procedures to be implemented at the EDM site by GCL field personnel during oversight of field investigation activities which involve environmental measurements. Field investigation activities which will involve environmental measurements are as follows:

- o Surface Soil
- o Surface Water
- o Surface Water Sediment
- o Subsurface Soil
- o Ground Water
- o Leachate

During oversight of field investigation activities, GCL field personnel will accept sample splits from the RP's contractor(s) for each environmental measurement.

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1.3 PROJECT ORGANIZATION AND RESPONSIBILITY

Table 1-1 provides a list of key project personnel and their corresponding responsibilities for the EDM RI/FS. Figure 1-1 presents the project organization and responsibilities of key project personnel.

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TABLE 1-1
KEY PROJECT PERSONNEL AND THEIR
CORRESPONDING RESPONSIBILITIES

B. Virginia Nicholas (GCL)	- Sampling Operations
B. Virginia Nicholas (GCL)	- Sampling QC
Contract Laboratory Program (CLP)	- Laboratory Analysis
Contract Laboratory Program (CLP)	- Laboratory QC
Suzanne Billings (EPA)	- Data Processing Activities
Suzanne Billings (EPA)	- Data Processing QC
Environmental Services Assistance Team (ESAT)	- Data Quality Review
Sonce Silvernale (CDM FPC)	- Field Performance Auditing
Sonce Silvernale (CDM FPC)	- Field Systems Auditing
RoseMary Ellersick (CDM FPC)	- Overall QA
James Hewitt (GCL)	- Overall Project Coordinator

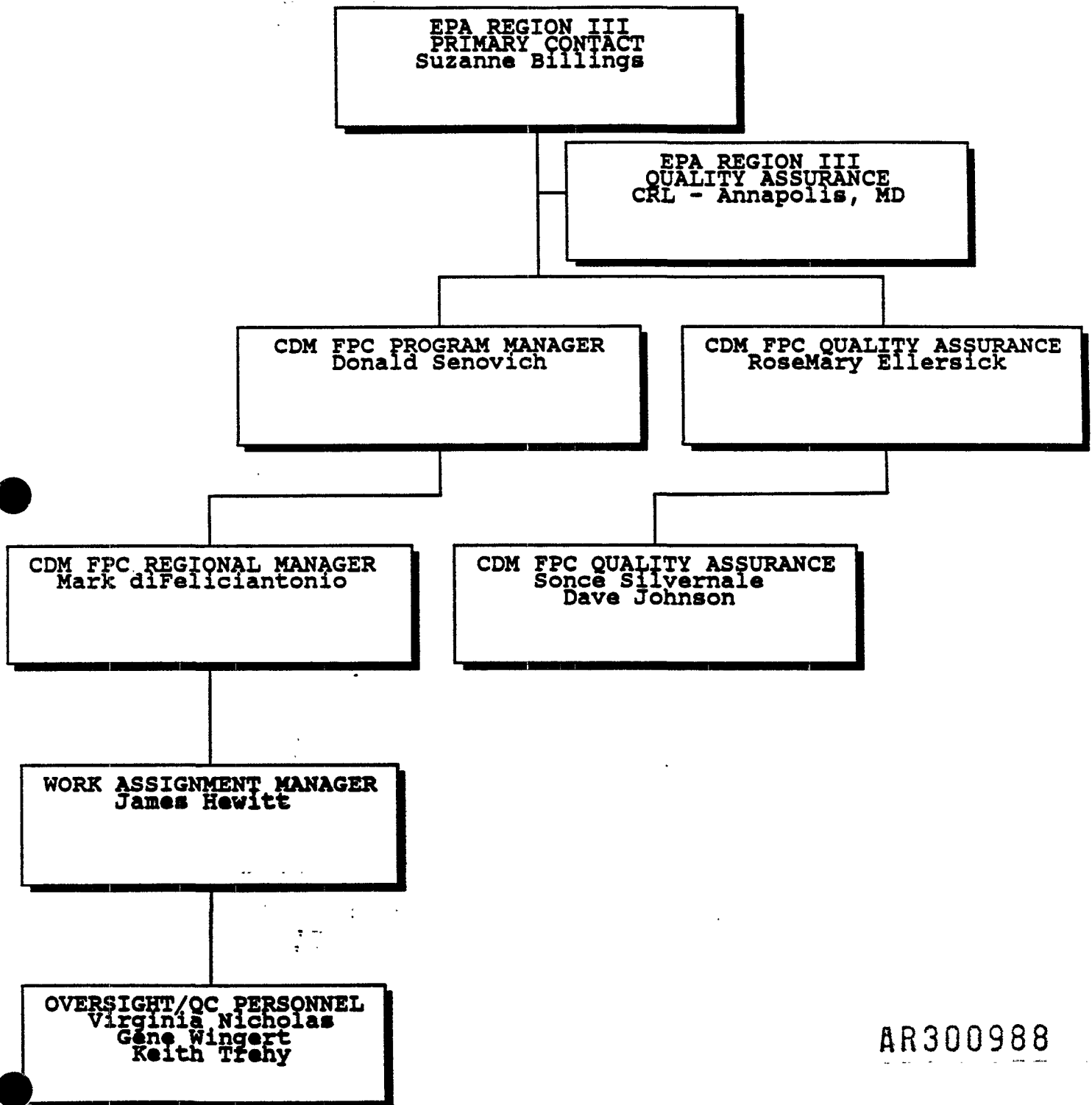
Notes:

QA = Quality Assurance

QC = Quality Control

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FIGURE 1-1
PROJECT ORGANIZATION AND RESPONSIBILITIES
OF KEY PROJECT PERSONNEL



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2.0 OVERSIGHT OF ENVIRONMENTAL MEASUREMENTS

GCL field personnel shall be responsible for observation of the RP's contractor(s) during oversight of field investigation activities which involve environmental measurements to assure contractor adherence to the field procedures identified within the EDM RISOP. GCL field personnel are also tasked with documentation and reporting of all deviations from these field procedures. All deviations and daily observations are to be recorded within field notebooks. GCL's document entitled "Statement of Work for Oversight of Field Investigations" provides definitive guidance for reporting and documentation of deviations.

The EDM RISOP and this site-specific QAPP must be available for reference at all times during oversight of field investigation activities; consequently, copies of these documents must be in the possession of GCL field personnel who are on-site during field investigation activities.

Environmental Resources Management, Inc. (ERM), the RP's Prime Contractor, shall be responsible for providing prelabeled sample containers and creating sample splits in accordance with the RISOP and the procedures detailed in Section 3.2 of this QAPP. GCL field personnel shall be responsible for acceptance of sample splits from ERM. GCL field personnel shall also be responsible for packaging and shipping these sample splits to the appropriate Contract Laboratory Program (CLP) laboratories. This effort shall include preparation of sample container labels, sample tags, chain of custody forms and traffic report forms as well as recording all pertinent sampling information within the field notebook. GCL will obtain sample tags, chain of custody forms, chain of custody seals, and traffic report forms from EPA's Central Regional Laboratory (CRL). ERM will transfer custody of the sample splits to GCL by signing the completed chain of custody forms.

3.0 SAMPLE SPLITS

3.1 SAMPLE MEDIA, NUMBER OF SAMPLE LOCATIONS, AND CHEMICAL ANALYSES

Table 3-1 summarizes the sample media, sample matrix and concentration, number of sampling locations, and the chemical analyses to be performed on the sample splits to be accepted by GCL field personnel during oversight of field investigation activities. A minimum of 15 percent of the total number of samples collected during these field investigation activities shall be split by ERM. GCL field personnel shall accept not less than one upgradient and downgradient sample for each media listed.

3.2 SAMPLE SPLITS COLLECTION PROCEDURES

3.2.1 Surface Soil

The surface soil sample splits will be collected from the land surface to a depth of 18 inches with a decontaminated hand-driven bucket auger. The soil sample splits will be removed from the bucket auger using a decontaminated stainless steel trowel or spoon. Volatile organic sample splits will be created by placing an equal volume of soil from the 6-12 inch depth directly into the sample containers. Soil from the 0-6 inch depth will be placed into a decontaminated stainless steel pan and homogenized with a decontaminated stainless steel trowel or spoon. The semivolatile, PCB/pesticide, and inorganic sample splits will be created by placing an equal volume of soil from the pan into the sample containers. The surface soil sample splits shall be preserved in accordance with the EDM RISOP.

3.2.2 Surface Water

The surface water sample splits will be collected with a decontaminated glass beaker. The sample splits will be collected in the beaker at a point upstream from where the sampler is positioned. The sample splits will be created by pouring an equal volume of surface water from the beaker into the sample containers. Surface water sample splits for filtered metals will be created by pouring an equal volume of surface water from the filtration apparatus into the sample containers. The surface water sample splits shall be preserve in accordance with the EDM RISOP.

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TABLE 3-1

SUMMARY OF SAMPLE SPLITS TO BE ACCEPTED DURING THE RI
EASTERN DIVERSIFIED METALS, HOMETOWN, PENNSYLVANIA

MEDIA	SAMPLE MATRIX (CONCENTRATION)	NUMBER OF SAMPLING LOCATIONS	NUMBER OF SAMPLES FOR CHEMICAL ANALYSIS:				
			TCL [1] VOA	TCL SVOA	TCL PCB/PEST	TAL [2] INORG	TCL METALS
Surface Soil	Soil (low)	4	4	4	4	4	0
Surface Water	Water (low)	2	0	2	2	0	2
Surface Water Sediment	Sediment (low)	2	0	2	2	2	0
Leachate	Water (high)	2	2	2	2	2	0
Subsurface Soil	Soil (low)	2	2	2	2	0	2
Ground Water [3]	Water (low)	3	3	3	3	3	0

NOTES:

[1] TCL = Target Compound List

[2] TAL = Target Analyte List

[3] Includes first round of ground water sampling

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3.2.3 Surface Water Sediment

The surface water sediment sample splits will be collected at the same locations as the surface water sample splits. If fine sediment is encountered, a composite sample comprised of equal volumes of fine sediment collected from two points within the immediate vicinity of each surface water sample will be homogenized in a decontaminated stainless steel pan with a decontaminated stainless steel trowel or spoon. The sample splits will be created by placing an equal volume of sediment from the pan into the sample containers. The surface water sediment sample splits shall be preserved in accordance with the EDM RISOP.

3.2.4 Subsurface Soil

The subsurface soil sample splits will be obtained directly from the split spoon barrel with a decontaminated stainless steel spoon. The sample splits will be created by placing an equal volume of soil from the split spoon barrel into the sample containers. The subsurface soil sample splits shall be preserved in accordance with the EDM RISOP.

3.2.5 Ground Water

The ground water sample splits will be collected with a decontaminated stainless steel bailer. The sample splits will be created by pouring an equal volume of ground water from the bailer into the sample containers. Ground water sample splits for filtered metals will be created by pouring an equal volume of ground water from the filtration apparatus into the sample containers. The ground water sample splits shall be preserved in accordance with the EDM RISOP.

3.2.6 Leachate

The leachate sample splits will be obtained by digging a small catchment pool with a decontaminated stainless steel trowel. This catchment pool will be allowed to fill and run clear of suspended turbidity before collection of sample splits. The sample splits will be created by collection with a decontaminated glass beaker. An equal volume of leachate will be poured from the beaker into the sample containers. The

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leachate sample splits shall be preserved in accordance with the EDM RISOP.

3.3 FIELD PRESERVATION

ERM shall be responsible for preserving all sample splits in accordance with the EDM RISOP.

3.4 LABELING, CHAIN OF CUSTODY, AND SHIPPING PROCEDURES

ERM personnel shall be responsible for collection and placement of sample splits within the appropriate types of sample containers. The exterior surface of all sample containers shall be wiped clean by ERM personnel after sample splits have been collected to remove any residue before transfer to GCL custody. GCL field personnel shall complete the sample split container label information which shall include the sample number, analyses to be performed, date and time of sample collection. GCL field personnel shall also prepare sample tags which identify sample location, time of collection, date, sample station number, sample preservation, sample container lot number, and the analyses to be performed for each sample split. Sample tags shall be completed and attached to the containers by GCL field personnel. The chain of custody forms provide complete information regarding the total number of containers being submitted to the laboratory, sampling station and location, sample delivery airbill number, time and date of sample collection, sample type, project name and number, required analyses, and all required signatures. These forms and the chain of custody seals will be completed by GCL field personnel. GCL field personnel will also prepare an organic, inorganic or high hazard traffic report form for each sample split collected. Each traffic report form shall list the case number, sample description, sampling office and shipping information, sample location, laboratory address, and the analyses to be performed. ERM will transfer custody of the sample splits to GCL by signing the completed chain of custody forms.

Sample tags, chain of custody forms, chain of custody seals, and traffic report forms obtained from EPA's CRL will be utilized by GCL field personnel during labeling of sample containers. Examples of a sample

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tag, a chain of custody form, a chain of custody seal, and traffic report forms are provided in Appendix A.

All sample splits accepted by GCL shall be packed and shipped in accordance with the procedures outlined in "User's Guide to the Contract Laboratory Program" dated December 1986.

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4.0 QUALITY ASSURANCE / QUALITY CONTROL

The purpose of quality assurance and quality control is to ensure the generation of accurate, useful data. The procedures identified within this QAPP shall be implemented by GCL field personnel to ensure the quality of data collected during oversight of field investigation activities which involve environmental measurements. Any deviations from this QAPP shall be recorded within the field notebook. The EPA Primary Contact, Ms. Suzanne Billings, and the Sample Management Office (SMO) shall be immediately notified by telephone, should deviations occur in any one of the following:

- o the number of samples to be collected;
- o chemical analyses; or
- o sample matrix.

All telephone discussions between GCL and the EPA Primary Contact, SMO, ERM personnel or other parties during oversight of field investigation activities shall be recorded on GCL Telephone Record Forms (see Appendix A).

4.1 CHAIN OF CUSTODY

Complete information for each sample split shall be entered on the chain of custody form as the sample split is collected (see Appendix A). Appropriate signatures shall be affixed to this form when the shipping container is transferred to the courier responsible for transporting the samples to the CLP laboratories. All paperwork shall be completed with ball point pen to ensure clear reproduction of all copies (carbon copies).

4.2 FIELD NOTEBOOK

Bound field notebook(s) shall be compiled and maintained by GCL field personnel during oversight of field investigation activities. All field notebook entries shall be in ink. Each page within the field notebook(s) shall be consecutively numbered.

The following information shall be recorded on a daily basis within each field notebook:

- o all personnel on-site during each field investigation;
- o all field equipment used by GCL during each field investigation;
- o date and weather conditions;
- o descriptions of permanent structures and features such as wells, containment structures, buildings, roads, culverts, and topographic features;
- o sample split locations relative to permanent structures;
- o notes on visual signs of contamination (such as oily discharges, discolored surfaces, dead or stressed vegetation);
- o any deviations from the field procedures within the EDM RISOP or this site-specific QAPP;
- o references to all field generated paperwork; and
- o sample number, tag number, sample container lot number, chain of custody form number, and sample delivery airbill number.

All field notebook entries shall include the recorder's signature and date. Upon completion of daily activities, GCL's field personnel team leader shall read, sign and date all entries made within the field notebook(s). All errors within field notebook entries shall be corrected by drawing a single line through the error. Each error shall be initialed and dated by the recorder. "Spot-check" audits of field notebooks shall be performed by GCL's Quality Assurance Officer to ensure that field notebook entries are made in accordance with this site-specific QAPP.

4.3 QUALITY CONTROL SAMPLES

Table 4-1 summarizes the sample media, chemical analyses, and number and type of quality control sample splits to be accepted by GCL field personnel during the field investigations. The number and type of quality control samples specified herein are in accordance with EPA's "User's Guide to the Contract Laboratory Program" dated December 1986.

TABLE 4-1

SUMMARY OF QUALITY CONTROL SAMPLE SPLITS TO BE ACCEPTED
DURING THE RI, EASTERN DIVERSIFIED METALS,
HOMETOWN, PENNSYLVANIA

MEDIA	CHEMICAL ANALYSIS	NUMBER AND FIELD DUP	TYPE OF QC SAMPLES: MS/MSD [1]	TRIP BLANK	EQUIPMENT BLANK
Surface Soil	VOA	1	NR [2]	1	1
	SVOA	1	NR	NR	1
	PCB/PEST	1	NR	NR	1
	INORG	1	NR	NA [3]	NR
Surface Water	VOA	0	0	1	NR
	SVOA	1	1	NR	1
	PCB/PEST	1	1	NR	1
	METALS	1 [4]	NR	NR	1 [4]
Surface Water Sediment	VOA	0	NR	1	NR
	SVOA	1	NR	NR	NR
	PCB/PEST	1	NR	NR	NR
	INORG	1	NR	NA	NR
Leachate	VOA	1	1	1	1
	SVOA	1	1	NR	1
	PCB/PEST	1	1	NR	1
	INORG	1 [5]	NR	NR	1 [5]
Subsurface Soil	VOA	1	NR	1	1
	SVOA	1	NR	NR	1
	PCB/PEST	1	NR	NR	1
	METALS	1	NR	NA	NR
Ground Water	VOA	1	1	1	1
	SVOA	1	1	NR	1
	PCB/PEST	1	1	NR	1
	INORG	1 [6]	NR	NR	1 [6]

NOTES:

- [1] MS/MSD = Matrix Spike/Matrix Spike Duplicate
 [2] NR = Not Required
 [3] NA = Not Available
 [4] Includes filtered metals and unfiltered metals
 [5] Includes unfiltered metals and cyanide
 [6] Includes filtered metals and cyanide

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4.3.1 Quality Control Sample Collection Procedures

Field duplicate samples will be created by doubling the volume of sample splits. Matrix spike/matrix spike duplicate samples will be created by tripling the volume of sample splits. Matrix spike/matrix spike duplicate samples are not required for soil and sediment. Trip blank samples will be supplied by GCL. The trip blanks will be created by pouring High Performance Liquid Chromatography (HPLC) grade water directly into the sample containers.

Surface soil equipment blank samples will be created by pouring HPLC grade water over the decontaminated stainless steel trowel or spoon and collecting the water in the appropriate sample containers for each parameter (as aqueous samples). Subsurface soil equipment blank samples will be collected in the same manner as surface soil equipment blank samples.

Surface water equipment blank samples will be created by pouring HPLC grade water into a decontaminated glass beaker and pouring the water from the beaker into the appropriate sample containers. Surface water equipment blank samples for filtered metals will be created by pouring HPLC grade water into a decontaminated glass beaker. Water from the beaker will be filtered with a decontaminated Millipore Hazardous Waste Filtration apparatus (using a new filter) and collected within the appropriate sample containers. Leachate equipment blank samples will be collected in the same manner as surface water equipment blank samples.

Ground water equipment blank samples will be created by pouring HPLC grade water into the top of a decontaminated stainless steel bailer. The water will then be released from the bottom of the bailer and collected within the appropriate sample containers. Ground water equipment blank samples for filtered metals will be obtained by pouring HPLC grade water into the top of a stainless steel bailer. The water will then be released from the bottom of the bailer, filtered with a decontaminated Millipore Hazardous Waste Filtration apparatus, and collected within the appropriate sample containers.



5.0 HEALTH AND SAFETY CONSIDERATIONS

The hazards associated with GCL's acceptance of sample splits during oversight of these field investigation activities are considered to be low. This conclusion is based on the mutual understanding that ERM personnel shall be responsible for collection and placement of the sample splits within sample containers; hence, GCL field personnel will not be directly involved with collection of sample splits. In addition, the exterior surface of all sample containers shall be wiped clean by ERM personnel after collection of sample splits to remove any residue before transfer to GCL custody; therefore, GCL field personnel should not come in direct contact with waste or sample material. In all instances, GCL field personnel shall adhere to the site-specific Health and Safety Plan.

APPENDIX A
FIELD OVERSIGHT DOCUMENTATION AND FORMS

AR301000

Custody Seal

CUSTODY SEAL Date <u>5-28-83</u> Signature <u>Jane Doe</u>			CUSTODY SEAL Date <u>5-28-83</u> Signature <u>Jane Doe</u>

Sample Tag

Project Code W65310.C01 21.5M10.0		Station No. HW 26 SS-11(6)	Month/Day/Year 5-28-83	Time 1007	Designator Comp. <input type="checkbox"/> Grb <input checked="" type="checkbox"/>																															
Tag No. 10502 Lab Sample No.	Station Location Monitoring well #26 Split Spoon # 11		Sampler (Signature) <u>Jane Doe</u>																																	
	<table border="1"> <tr> <td rowspan="10"> ANALYSES Preservative: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> </td> <td>BOD Asides</td> <td></td> </tr> <tr> <td>Solids (max from ash)</td> <td></td> </tr> <tr> <td>COD, TOD, Nutrients</td> <td></td> </tr> <tr> <td>Phenolics</td> <td></td> </tr> <tr> <td>Mercury</td> <td></td> </tr> <tr> <td>Metals</td> <td></td> </tr> <tr> <td>Cyanide</td> <td></td> </tr> <tr> <td>Oil and Grease</td> <td></td> </tr> <tr> <td>Organics (GC/MS)</td> <td>X</td> </tr> <tr> <td>Priority Pollutants</td> <td>X</td> </tr> <tr> <td>Volatile Organics</td> <td>X</td> </tr> <tr> <td>Pesticides</td> <td>X</td> </tr> <tr> <td>Mutagenicity</td> <td></td> </tr> <tr> <td>Bacteriology</td> <td></td> </tr> <tr> <td colspan="2"> Remarks: Case 1746 NR & HE0637 Bottle Lot # 63229 </td> </tr> </table>						ANALYSES Preservative: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	BOD Asides		Solids (max from ash)		COD, TOD, Nutrients		Phenolics		Mercury		Metals		Cyanide		Oil and Grease		Organics (GC/MS)	X	Priority Pollutants	X	Volatile Organics	X	Pesticides	X	Mutagenicity		Bacteriology		Remarks: Case 1746 NR & HE0637 Bottle Lot # 63229
ANALYSES Preservative: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	BOD Asides																																			
	Solids (max from ash)																																			
	COD, TOD, Nutrients																																			
	Phenolics																																			
	Mercury																																			
	Metals																																			
	Cyanide																																			
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	Priority Pollutants	X																																		
Volatile Organics	X																																			
Pesticides	X																																			
Mutagenicity																																				
Bacteriology																																				
Remarks: Case 1746 NR & HE0637 Bottle Lot # 63229																																				



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AR301001

CHAIN OF CUSTODY RECORD

Electronic: Original Accounting Statement; Copy to Coordinator Field File

2090

AR301002

*Form to be revised



U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
PO Box 818 Alexandria, VA 22313-703 557 2490-FTS 557 2490

Sample Number

INORGANICS TRAFFIC REPORT

① Case Number: _____ Sample Site Name/Code: _____ _____ _____	② SAMPLE CONCENTRATION (Check One) ____ Low Concentration ____ Medium Concentration ③ SAMPLE MATRIX (Check One) ____ Water ____ Soil/Sediment	④ Ship To: Area: _____ Transfer Ship To: _____
⑤ Sampling Office: _____ Sampling Personnel: (Name) _____ (Phone) _____ Sampling Date: (Begin) _____ (End) _____	⑥ Shipping Information: Name Of Carrier: _____ Date Shipped: _____ Airbill Number: _____	
⑦ Sample Description: (Check One) ____ Surface Water ____ Ground Water ____ Leachate ____ Mixed Media ____ Solids ____ Other _____ (specify) MATCHES ORGANIC SAMPLE NO. _____	⑧ Mark Volume Level On Sample Bottle Check Analysis required ____ Total Metals ____ Cyanide	

AR301003

* Form to be revised



U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 812, Arlington, Virginia 22203-705 547 240-775 557 240

Sample Number

ORGANICS TRAFFIC REPORT

① Case Number: Sample Site Name/Code: 		② SAMPLE CONCENTRATION (Check One) <input type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration 		④ Ship To: Attn: Transfer Ship To: 																														
③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input type="checkbox"/> Soil/Sediment 		⑤ Regional Office: Sampling Personnel: (Name) (Phone) Sampling Date: (Begin) (End)																																
⑥ For each sample collected specify number of containers used and mark volume level on each bottle.																																		
						<table border="1"> <thead> <tr> <th></th> <th>Number of Containers</th> <th>Approximate Total Volume</th> </tr> </thead> <tbody> <tr> <td>Water (Extractable)</td> <td></td> <td></td> </tr> <tr> <td>Water (VOA)</td> <td></td> <td></td> </tr> <tr> <td>Soil/Sediment</td> <td></td> <td></td> </tr> <tr> <td>Water (Ext/VOA)</td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Number of Containers	Approximate Total Volume	Water (Extractable)			Water (VOA)			Soil/Sediment			Water (Ext/VOA)			Other											
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Water (Ext/VOA)																																		
Other																																		
⑦ Shipping Information Name of Carrier Date Shipped: Airbill Number: 																																		
⑧ Sample Description <input type="checkbox"/> Surface Water <input type="checkbox"/> Mixed Media <input type="checkbox"/> Ground Water <input type="checkbox"/> Solids <input type="checkbox"/> Leachate <input type="checkbox"/> Other (specify) _____		⑨ Sample Location 																																
⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)																																		

280007

AR301004

* Form to be revised



U.S. ENVIRONMENTAL PROTECTION AGENCY CLP Sample Management Office
PO Box 816 Alexandria, VA 22304 Phone 703/557-2111 FAX 557/2641

Article Number

E 6402

HIGH HAZARD TRAFFIC REPORT

FIELD SAMPLE RECORD

① Case Number: _____ Sample Site Name/Code: _____ _____ _____	② Field Sample Description: — Drum — Aqueous Liquid _____ — Sludge — Solid — Oil — Other _____	③ Ship To: Attn:
④ Sampling Office: _____ Sampling Personnel: _____ (name) _____ (phone) Sampling Date: _____ (begin) (end)	⑤ Known or Suspected Hazard: _____ _____ _____ _____ _____	⑥ Sample Location:
⑧ Shipping Information: _____ (name of carrier) _____ (date shipped) _____ (airbill number)	⑦ Preparations Requested: (check below) Sample Volume: _____ — Organics — Volatile Organics — Base/Neutral Acid TCDD — Pesticides, PCB — Inorganics — Total Metals — Total Mercury — Strong Acid Anions	
⑨ Special Handling Instructions: 		

SMO Copy

AR301005

9-29-88

P 587 283 366

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

PS Form 3800, Feb. 1982		★ U.S.G.P.O. 1983-403-517	
Return Receipt for Restricted Delivery		Return Receipt for Restricted Delivery	
Return Receipt Showing to whom and Date Delivered		Return Receipt Showing to whom and Date Delivered	
Return receipt showing delivery Date, and Address of delivery		Return receipt showing delivery Date, and Address of delivery	
TOTAL Postage and Fees		TOTAL Postage and Fees	
Postmark or Date		Postmark or Date	
ORIGINAL (Ref)		ORIGINAL (Ref)	

P 587 283 367

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to U.S. Marilyn Hewitt Project Coordinator Street and No. Emp. Resource Hq. Inc. 555 Springdale Drive Exton, PA 19341 P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered APR 30 1987 Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	ORIGINAL (Red)